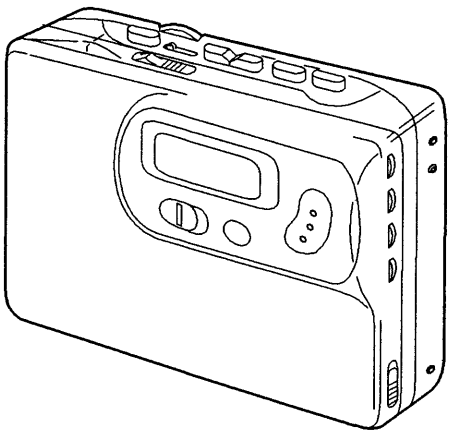
aiwa

HS-JX609
HS-J202MK6



STEREO RADIO
CASSETTE RECORDER

SERVICE MANUAL

• BASIC TAPE MECHANISM : 2ZM – 2 R1 • TYPE. AH

改 定 版
[REVISION PUBLISHING]

SPECIFICATIONS

Frequency range
FM: 87.5/87.5-108.1/108MHz (200/50kHz STEP)
AM: 530/531-1,710/1,602kHz (10/9kHz STEP)
Maximum output
10mW+10mW (EIAJ/32Ω)
12mW+12mW (EIAJ/16Ω)
Power source
Battery DC 2V, rechargeable battery (PB-4S)
Battery DC 3V, R03 (size AAA) × 2
Domestic AC power (using the supplied AC adaptor)
Battery life
Using rechargeable battery (PB-4S)
Approx. 2 hours (EIAJ, REC/1 hour recharging)
Approx. 1.5 hours (EIAJ, PB 1mW/10 minutes recharging)
Approx. 3.5 hours (EIAJ, PB 1mW/1 hour recharging)
Using two LR03 (size AAA) alkaline batteries
Approx. 3 hours (EIAJ, REC)
Approx. 6.5 hours (EIAJ, PB 1mW)
Dimensions
109.4 (W) × 78.5 (H) × 32.2 (D) mm
(4 3/8 × 3 1/8 × 1 5/16 in.)
Weight
Approx. 230 g (0.48 lb) including rechargeable battery

<AC adaptor/AC-207>
Rated voltage
AC-207H AC 115V/230V, switchable
AC-207E AC 230V
Rated output
DC 2V 350mA

• Design and specifications are subject to change without notice.

S/M Code No. 09 – 942 – 051 – 401

DISASSEMBLY INSTRUCTIONS

Motor Removal (See Figure-1)

1) Remove screw (Ⓐ)
2) Release 6 Hooks and remove Holder FP.
3) Remove the Rotary Yoke, FP Coil and Rotor ASSY.

Motor Reinstallation (See Figure-1)

a) Insert the Pin ASSY into the FP Coil and solder it.
b) Install the Rotary Yoke, FP Coil and Rotor ASSY into the chassis.
c) Install the Holder FP and tighten screw (Ⓐ).

To Check the operation when the Main C. B is opened (See Figure-1)

A) Use Wires to connect the Motor Terminals and the terminals of the Main C. B.(See Figure-1-1)
B) Set the Mechanism to the PLAY mode.
C) Turn the POWER SW on. Or, use a solder to short the round on Main C. B. (See Figure-1-2)
D) Turn the MUTE SW off. Or, use a solder to short the round on Main C. B. (See Figure-1-3)

Note A Supply power through the DC Jack and make sound output from the HP Jack.

Note B Set the R/F SW to the F position during FWD PLAY.
Set the R/F SW to the R position during RVS PLAY.

PART NO	DESCRIPTION
09 - 001 - 258 - 010	2ZM - 2 MOTOR KIT

Caution When Reinstalling

1) Be careful not to damage the FP Coil since the magnet is strong.
2) Check that no foreign matter adheres to the magnet, etc.
3) Insert a sheet of Paper, etc. between the Rotary Yoke and FP Coil to prevent damage to the FP Coil.
(Remove the sheet of Paper when reinstalling)
4) After reinstalling, turn the motor with your fingers and check that no abnormal sound is head and it rotates smoothly.

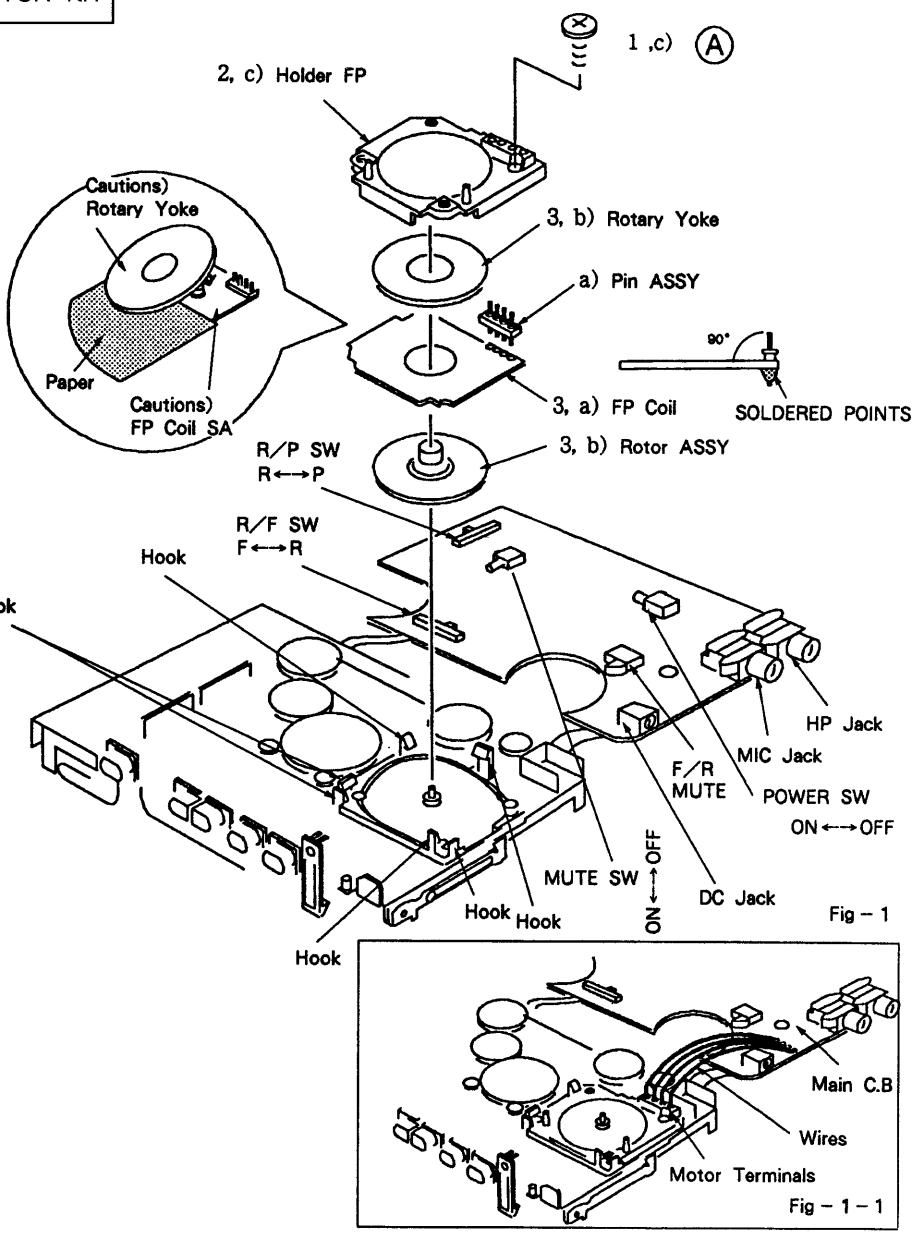


Fig-1-2

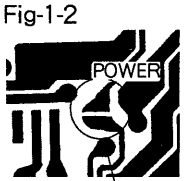
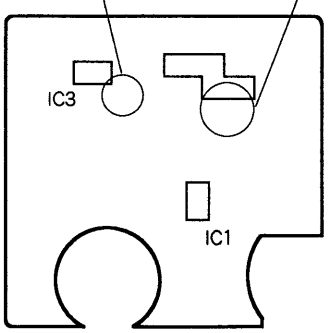


Fig-1-3



ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

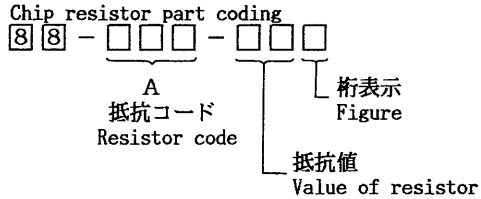
REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
IC			
	87-001-894-080		IC, TA8155FN
	87-020-234-080		IC, TA7688F(S)
	87-017-538-080		IC, LB1674V
	87-001-149-080		IC, TA8158F
	87-001-971-080		IC, TA8132AF
	87-001-145-080		IC, TA8126F
	87-001-151-080		IC, TD6134F1
	87-002-334-010		IC, TC9308F-030
	87-017-360-080		IC, SC7S04F
TRANSISTOR			
	87-026-467-080		C-TR, HN1C01F(GR)(CIG)
	89-342-132-080		C-TR, 2SC4213B(AB)
	87-026-411-080		C-TR, RN1304(XD)
	89-341-165-080		C-TR, 2SC4116GR(LG)
	87-026-414-080		C-TR, RN1307(XH)
	87-026-476-080		C-TR, RN1610(XK)
	89-115-884-080		C-TR, 2SA1588(Y)(ZY)
	89-113-625-080		C-TR, 2SA1362GR(AEG)
	87-026-474-080		C-TR, RN1605(XE)
	87-026-481-080		C-TR, RN4607(VH)
	87-026-475-080		C-TR, RN1607(HX)
	87-026-412-080		C-TR, RN1305(XE)
	87-026-425-080		C-TR, RN2307(YH)
	89-342-153-080		C-TR, 2SC42150(QO)
	89-508-824-080		C-FET, 2SK882Y(TY)
	87-026-358-080		C-TR, IMD6(D6)
	89-115-864-080		C-TR, 2SA1586Y(SY)
DIODE			
	87-001-553-080		C-DIODE, 1SS322(A9)
	87-001-166-080		C-DIODE, 1SS301(A3)
	87-001-221-080		C-DIODE, 1SS319(A4)
MAIN CIRCUIT BOARD			
C1	87-016-296-080		C-CAP, TN 22-4 SV(A)
C2	87-016-296-080		C-CAP, TN 22-4 SV(A)
C3	87-010-746-080		C-CAP, TN 10-4
C4	87-016-296-080		C-CAP, TN 22-4 SV(A)
C5	87-015-923-080		C-CAP, TN 0.22-35
C6	87-015-923-080		C-CAP, TN 0.22-35
C7	87-010-805-080		C-CAP, S 1-16 F
C8	87-010-805-080		C-CAP, S 1-16 F
C9	87-010-198-080		C-CAP, S 0.022-25 B
C10	87-010-198-080		C-CAP, S 0.022-25 B
C11	87-010-805-080		C-CAP, S 1-16 F
C12	87-010-805-080		C-CAP, S 1-16 F
C13	87-010-177-080		C-CAP, S 820P-50 SL
C14	87-010-177-080		C-CAP, S 820P-50 SL
C15	87-010-178-080		C-CAP, S 1000P-50 B
C16	87-010-178-080		C-CAP, S 1000P-50 B
C17	87-010-805-080		C-CAP, S 1-16 F
C18	87-010-322-080		C-CAP, S 100P-50 CH
C19	87-010-322-080		C-CAP, S 100P-50 CH
C20	87-010-805-080		C-CAP, S 1-16 F
C21	87-010-197-080		C-CAP, S 0.01-25 B
C22	87-010-197-080		C-CAP, S 0.01-25 B
C23	87-016-296-080		C-CAP, TN 22-4 SV(A)
C24	87-016-296-080		C-CAP, TN 22-4 SV(A)
C25	87-010-197-080		C-CAP, S 0.01-25 B
C26	87-010-183-080		C-CAP, S 2700P-50 B
C27	87-012-140-080		C-CAP, S 470P-50 CH
C28	87-010-182-080		C-CAP, S 2200P-50 B
C29	87-010-197-080		C-CAP, S 0.01-25 B
C30	87-010-197-080		C-CAP, S 0.01-25 B
C31	87-010-197-080		C-CAP, S 0.01-25 B
C32	87-010-424-080		C-CAP, TN 4.7-4
C33	87-010-198-080		C-CAP, S 0.022-25 B
C34	87-010-198-080		C-CAP, S 0.022-25 B
C60	87-010-805-080		C-CAP, S 1-16 F
C61	87-010-805-080		C-CAP, S 1-16 F
C62	87-010-196-080		C-CAP, S 0.1-25 F
C63	87-010-196-080		C-CAP, S 0.1-25 F
C64	87-010-805-080		C-CAP, S 1-16 F
C65	87-010-805-080		C-CAP, S 1-16 F
C66	87-010-805-080		C-CAP, S 1-16 F
C67	87-010-805-080		C-CAP, S 1-16 F
C80	87-010-178-080		C-CAP, S 1000P-50 B
C81	87-010-178-080		C-CAP, S 1000P-50 B
C84	87-010-824-010		CAP, E 220-2 (MJ)
C85	87-010-824-010		CAP, E 220-2 (MJ)
C86	87-010-805-080		C-CAP, S 1-16 F
C87	87-010-805-080		C-CAP, S 1-16 F
C88	87-010-197-080		C-CAP, S 0.01-25 B
C89	87-016-296-080		C-CAP, TN 22-4 SV(A)
C90	87-016-296-080		C-CAP, TN 22-4 SV(A)
C91	87-016-296-080		C-CAP, TN 22-4 SV(A)
C92	87-016-296-080		C-CAP, TN 22-4 SV(A)
C93	87-016-296-080		C-CAP, TN 22-4 SV(A)
C94	87-016-296-080		C-CAP, TN 22-4 SV(A)
C95	87-010-668-080		C-CAP, E 220-4 MV
C96	87-010-196-080		C-CAP, S 0.1-25 F
C97	87-010-668-080		C-CAP, E 220-4 MV
C98	87-012-142-080		C-CAP, S 0.33-16 F
C99	87-012-142-080		C-CAP, S 0.33-16 F
C100	87-010-482-040		CAP, E 220-4
C101	87-010-482-040		CAP, E 220-4
C120	87-012-141-080		C-CAP, S 0.22-16 F
C121	87-012-141-080		C-CAP, S 0.22-16 F
C122	87-012-142-080		C-CAP, S 0.33-16 F
C123	87-012-358-080		C-CAP, S 0.47-10FZ
J1	87-099-009-010		JACK, 3.5 BLK(L) N
J2	87-099-066-110		JACK, 3.5 RED(L)N
J3	87-049-549-010		JACK, DC
L1	87-003-240-080		C-COIL, S 3.3UH
L2	87-003-240-080		C-COIL, S 3.3UH
L3	87-003-240-080		C-COIL, S 3.3UH
L4	87-003-234-080		C-COIL, S 0.22UH
L5	87-007-270-080		C-COIL, OSC BIAS
R105	87-026-616-080		C-THMS, SN20-3L102KT
S1	87-036-244-080		C-SW, SLIDE 1-2-2(NC)
S2	87-036-244-080		C-SW, SLIDE 1-2-2(NC)
S3	87-036-123-080		C-SW, SLIDE 1-1-2
S4	87-036-123-080		C-SW, SLIDE 1-1-2
S5	87-036-123-080		C-SW, SLIDE 1-1-2
S6	87-036-312-080		C-SW, PUSH 102MH4
S7	87-036-237-080		C-SW, PUSH
S8	87-036-237-080		C-SW, PUSH
S9	82-ZM2-620-010		SW, LEAF BSW371
SFR1	87-024-611-080		C-SFR, 4.7K EVM 3SS
TM1	82-HJ4-209-110		TERM, ASSY B-BOX
VR1	87-024-620-010		VR, 20KAX2 DIA14N
TUNER CIRCUIT BOARD			
BT201	81-HR2-611-010		BAT, CL1220-1F5
C201	87-010-197-080		C-CAP, S 0.01-25 B
C202	87-010-311-080		C-CAP, S 12P-50 CH
C203	87-012-195-080		C-CAP, U 100P-50 CH
C204	87-010-312-080		C-CAP, S 15P-50 CH
C205	87-010-322-080		C-CAP, S 100P-50 CH
C206	87-010-313-080		C-CAP, S 18P-50 CH
C207	87-012-286-080		C-CAP, U 0.01-25 B
C208	87-010-178-080		C-CAP, S 1000P-50 B
C209	87-010-322-080		C-CAP, S 100P-50 CH

REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
C210	87-010-322-080		C-CAP, S 100P-50 CH
C211	87-010-197-080		C-CAP, S 0.01-25 B
C212	87-010-150-080		C-CAP, S 6P-50 CH
C213	87-010-152-080		C-CAP, S 8P-50 CH
C214	87-010-196-080		C-CAP, S 0.1-25 F
C215	87-010-197-080		C-CAP, S 0.01-25 B
C216	87-010-197-080		C-CAP, S 0.01-25 B
C217	87-010-186-080		C-CAP, S 4700P-50 B
C218	87-010-196-080		C-CAP, S 0.1-25 F
C219	87-010-197-080		C-CAP, S 0.01-25 B
C220	87-010-196-080		C-CAP, S 0.1-25 F
C221	87-010-197-080		C-CAP, S 0.01-25 B
C222	87-010-178-080		C-CAP, S 1000P-50 B
C223	87-010-196-080		C-CAP, S 0.1-25 F
C224	87-010-177-080		C-CAP, S 820P-50 SL
C226	87-010-198-080		C-CAP, S 0.022-25 B
C227	87-010-174-080		C-CAP, S 470P-50 SL
C229	87-012-251-080		C-CAP, U 27P-50 UJ
C230	87-012-282-080		C-CAP, U 4700P-50 B
C232	87-010-831-080		C-CAP, U 0.1-16F
C233	87-012-156-080		C-CAP, S 220P-50 CH
C235	87-010-198-080		C-CAP, S 0.022-25 B
C236	87-010-194-080		C-CAP, S 0.047-25 F
C237	87-010-424-080		C-CAP, TN 4.7-4
C238	87-010-805-080		C-CAP, S 1-16 F
C239	87-010-196-080		C-CAP, S 0.1-25 F
C240	87-010-195-080		C-CAP, S 0.068-25 F
C241	87-010-196-080		C-CAP, S 0.1-25 F
C242	87-010-186-080		C-CAP, S 4700P-50 B
C243	87-010-197-080		C-CAP, S 0.01-25 B
C244	87-010-197-080		C-CAP, S 0.01-25 B
C245	87-010-184-080		C-CAP, S 3300P-50 B
C246	87-010-805-080		C-CAP, S 1-16 F
C247	87-010-805-080		C-CAP, S 1-16 F
C248	87-010-805-080		C-CAP, S 1-16 F
C249	87-012-156-080		C-CAP, S 220P-50 CH
C250	87-010-322-080		C-CAP, S 100P-50 CH
C251	87-012-142-080		C-CAP, S 0.33-16 F
C252	87-010-154-080		C-CAP, S 10P-50 CH
C253	87-010-180-080		C-CAP, S 1500P-50 B
C254	87-010-196-080		C-CAP, S 0.1-25 F
C255	87-010-197-080		C-CAP, S 0.01-25 B
C256	87-010-505-080		C-CAP, TN 1-16
C257	87-010-746-080		C-CAP, TN 10-4
C258	87-010-197-080		C-CAP, S 0.01-25 B
C259	87-010-197-080		C-CAP, S 0.01-25 B
C260	87-010-197-080		C-CAP, S 0.01-25 B
C261	87-010-197-080		C-CAP, S 0.01-25 B
C262	87-010-322-080		C-CAP, S 100P-50 CH
C263	87-010-322-080		C-CAP, S 100P-50 CH

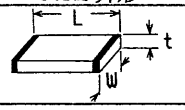
REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
C264	87-010-196-080		C-CAP, S 0.1-25 F
C265	87-010-316-080		C-CAP, S 33P-50 CH
C266	87-010-151-080		C-CAP, S 7P-50 CH
C267	87-010-805-080		C-CAP, S 1-16 F
C268	87-010-831-080		C-CAP, U 0.1-16F
C269	87-010-831-080		C-CAP, U 0.1-16F
C270	87-010-196-080		C-CAP, S 0.1-25 F
C271	87-010-197-080		C-CAP, S 0.01-25 B
C272	87-010-316-080		C-CAP, S 33P-50 CH
C273	87-010-805-080		C-CAP, S 1-16 F
CF201	87-008-406-080		BPF, GFMB1
CF202	87-008-455-080		C-FILTER KIT 10.7, 2-
CF203	+++		C-FILTER KIT 10.7, 2-
CF205	+++		C-FILTER KIT 10.7, 2-
CF204	87-008-396-080		C-FILTER, CF, 450KHZ
CF206	87-008-397-010		FILTER, SAW, 456, F18
CT201	87-011-189-080		C-TRIMMER, CTZ-10A
D204	87-001-945-080		C-LED 1PR51
L201	82-HJ4-610-010		COIL, FM OSC
L202	87-005-564-080		C-COIL, S 2.2UH K
L203	82-HJ4-611-010		COIL, FM RF
L204	87-008-420-080		C-IFT, 450K, MW
L205	80-HJ1-613-010		BAR, ANTENA ASSY
L206	87-003-247-080		C-COIL, 100UH J
L207	87-006-173-080		C-COIL, DD, 5CDL
L208	87-003-243-080		C-COIL, S 10UH K
LCD201	83-HJ9-603-010		LCD, ASSY 030
SW201	87-036-123-080		C-SW, SLIDE 1-1-2
SW202	87-036-123-080		C-SW, SLIDE 1-1-2
SW203	87-036-123-080		C-SW, SLIDE 1-1-2
SW204	87-036-342-080		C-SW, TACT V
SW205	87-030-152-080		C-SW, TACT SKHU260
SW206	87-030-152-080		C-SW, TACT SKHU260
SW207	87-036-342-080		C-SW, TACT V
SW208	87-036-342-080		C-SW, TACT V
SW209	87-036-342-080		C-SW, TACT V
VC201	87-026-359-080		C-VARICAP, KV1410
VC202	87-026-359-080		C-VARICAP, KV1410
VC203	87-026-435-080		C-VARICAP, KV1560
X201	87-030-180-010		X'TAL KF-38R5-8A
HEAD FLEX. CIRCUIT BOARD			
RPH	82-HJ4-601-010		HEAD ASSY(W/PCB-C)
TUNER FLEX. CIRCUIT BOARD			
PCB-D	82-HJ4-605-010		PWB, FLEX TU

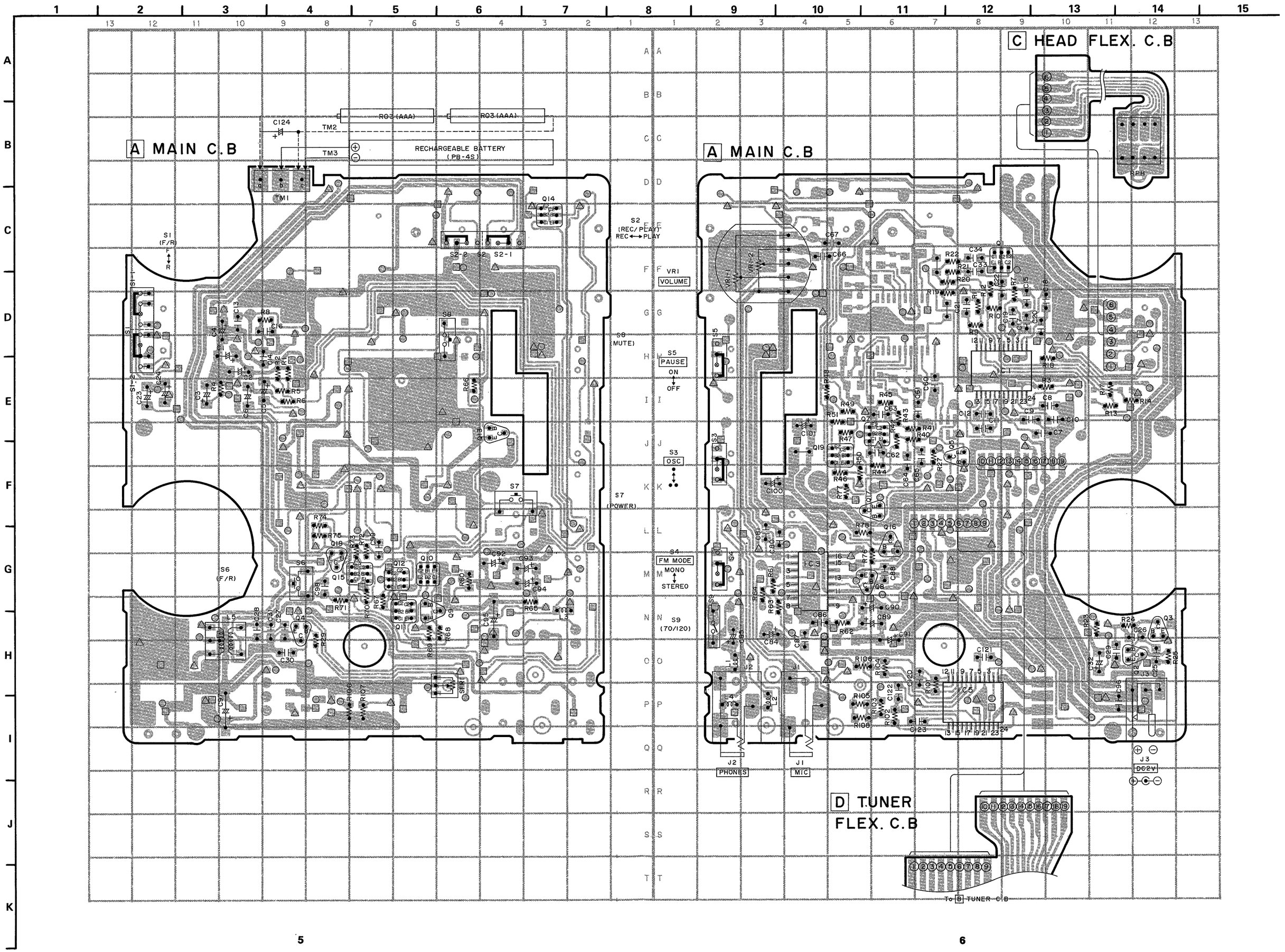
○チップ抵抗部品コード／CHIP RESISTOR PART CODE

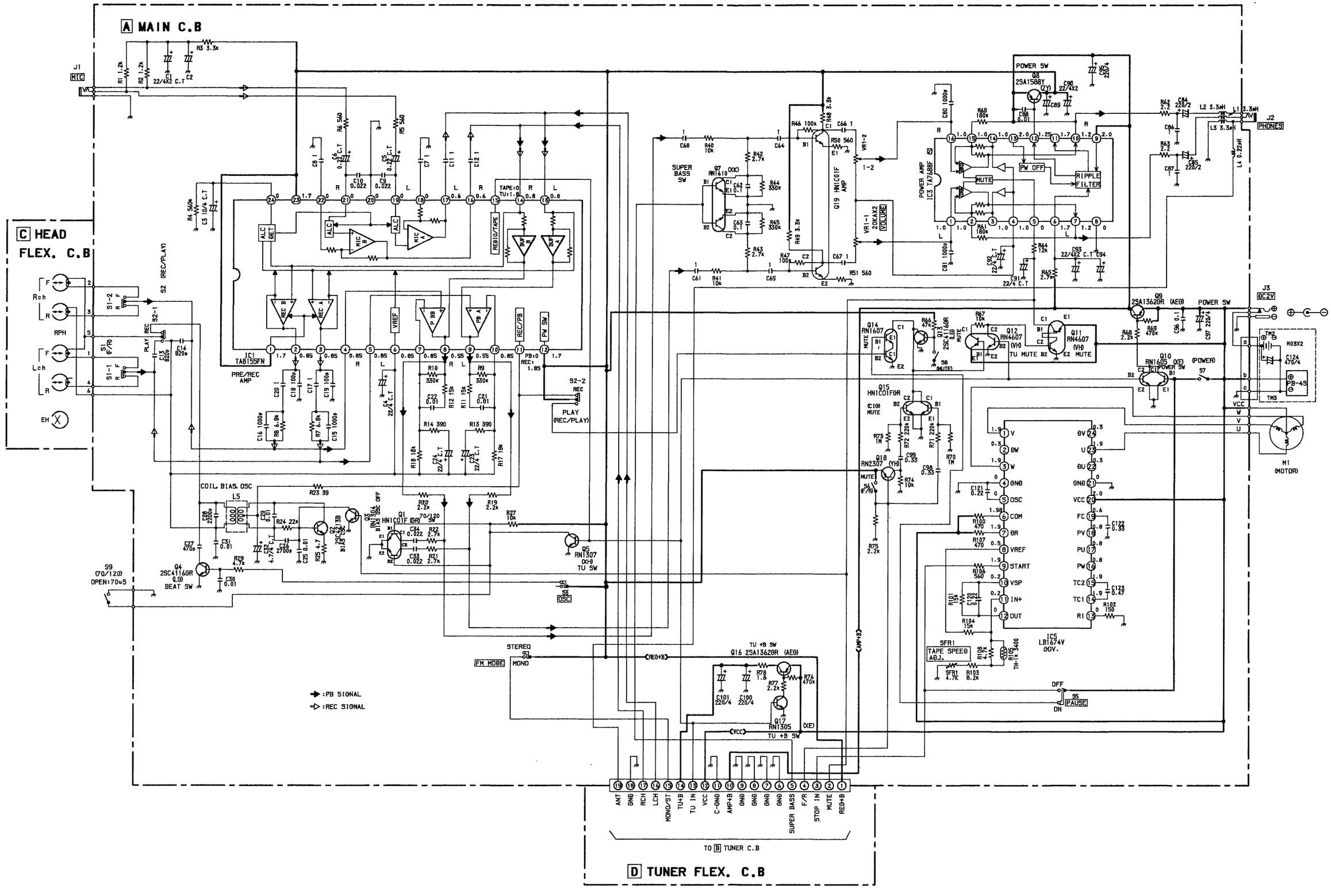
チップ抵抗部品コードの成り立ち
Chip resistor part coding



チップ抵抗
Chip resistor

Wattage 容量	Type 種類	Tolerance 許容誤差	Symbol 記号	Dimensions／寸法(mm) Form/外形	L	W	t	Resistor Code : A 抵抗コード : A
1/32W	1608	±5%	CJ		1.6	0.8	0.35	108
1/10W	2125	±5%	CJ		2	1.25	1.45	118
1/8W	3216	±5%	CJ		3.2	1.6	0.5 ～0.7	128


A MAIN C.B
C HEAD FLEX. C.B
A MAIN C.B
C124
TM2
TM3
R03 (AAA)
R03 (AAA)
RECHARGEABLE BATTERY (PB-4S)
TM1
S1 (F/R)
S2 (REC/PLAY) REC ↔ PLAY
S2-2
S2-1
VR1 VOLUME
S8 (MUTE)
S5 PAUSE ON OFF
S3 OSC
S7 (POWER)
S4 FM MODE MONO ↕ STEREO
S9 (70/120)
S6 (F/R)
RPH
J2 PHONES
J1 MIC
J3 DC2V
D TUNER FLEX. C.B
To B TUNER C.B


A MAIN C.B
C HEAD FLEX. C.B
D TUNER FLEX. C.B
J1 MIC
J2 PHONES
J3 DC2V
IC1 TA8155FN
PRE/REC AMP
IC5 LB1674V GOV.
POWER AMP IC3 TA7688F
SUPER BASS SW
COIL BIAS. OSC
S1 (F/R)
S2 (REC/PLAY)
S5 OSC
S6 (MUTE)
S7 (POWER)
S9 (70/120) OPEN:70uS
BEAT SW
TU +B SW
FM MODE
STEREO
MONO
PAUSE
M1 (MOTOR)
:PB SIGNAL
:REC SIGNAL
ANT GND RCH LCH MONO/ST TU+B TU IN VCC C-GND AMP+B GND GND GND GND SUPER BASS F/R STOP IN MUTE REG+B
TO B TUNER C.B

B TUNER C.B

B TUNER C.B

D TUNER FLEX. C.B

To A MAIN C.B

S203 SUPER BASS ON ↕ OFF

S205 PRESET/CLOCK

S206 RADIO ON OFF/ BAND

D204 OPE/BATT

S202 AM STEP 9KHz ⟷ 10KHz

S207 UP/HOUR

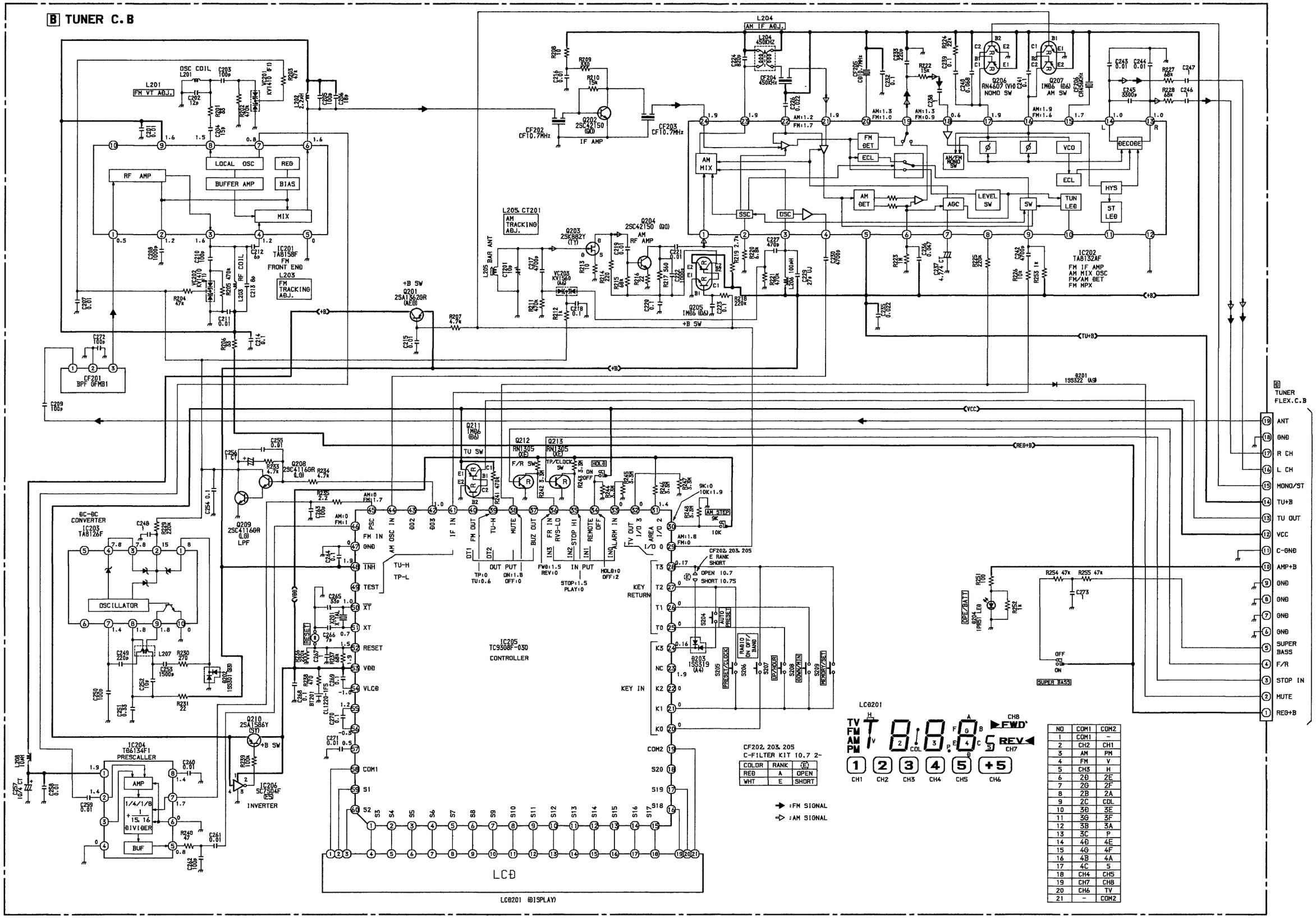
S208 DOWN/MIN

S209 MEMORY/SET

S204 AUTO PRESET

S201 HOLD OFF ⟷ ON

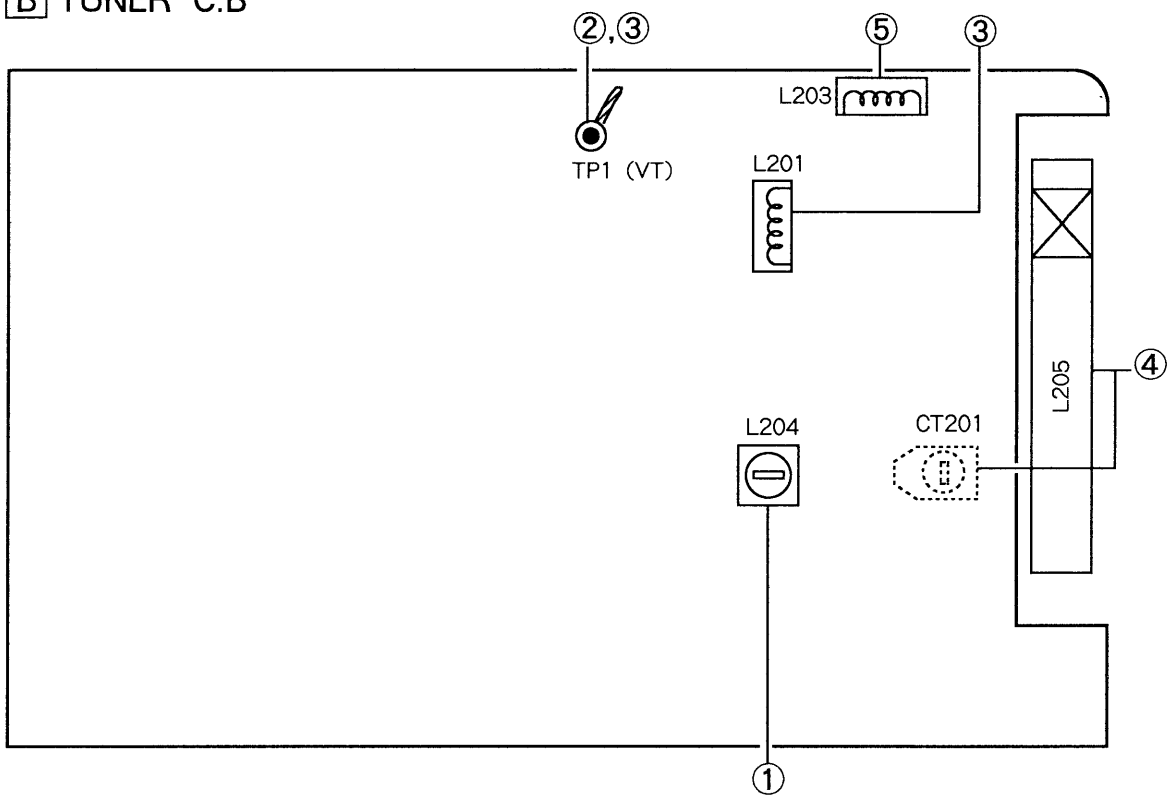
(E): CF202,203,205 E RANK SHORT



NO	COM1	COM2
1	COM1	–
2	CH2	CH1
3	AM	PM
4	FM	V
5	CH3	H
6	2D	2E
7	2G	2F
8	2B	2A
9	2C	COL
10	3D	3E
11	3G	3F
12	3B	3A
13	3C	P
14	4D	4E
15	4G	4F
16	4B	4A
17	4C	5
18	CH4	CH5
19	CH7	CH8
20	CH6	TV
21	–	COM2

ADJUSTMENT

B TUNER C.B



<RADIO SECTION>

1. AM IF Adjustment

L204 ..... 450kHz

2. AM VT Check

Settings : Test point • TP1

Method : Set to AM531kHz and TP1, check the voltage for more than 0.65V.

• 7.0~8.0V at AM 1,602kHz.

3. FM VT Adjustment

Settings : Test point • TP1

Adjustment location • L201

Method : Set to FM 87.5MHz and adjust L201 so that the test point becames 1.0~1.2V.

• 6.0~8.0V at FM 108MHz.

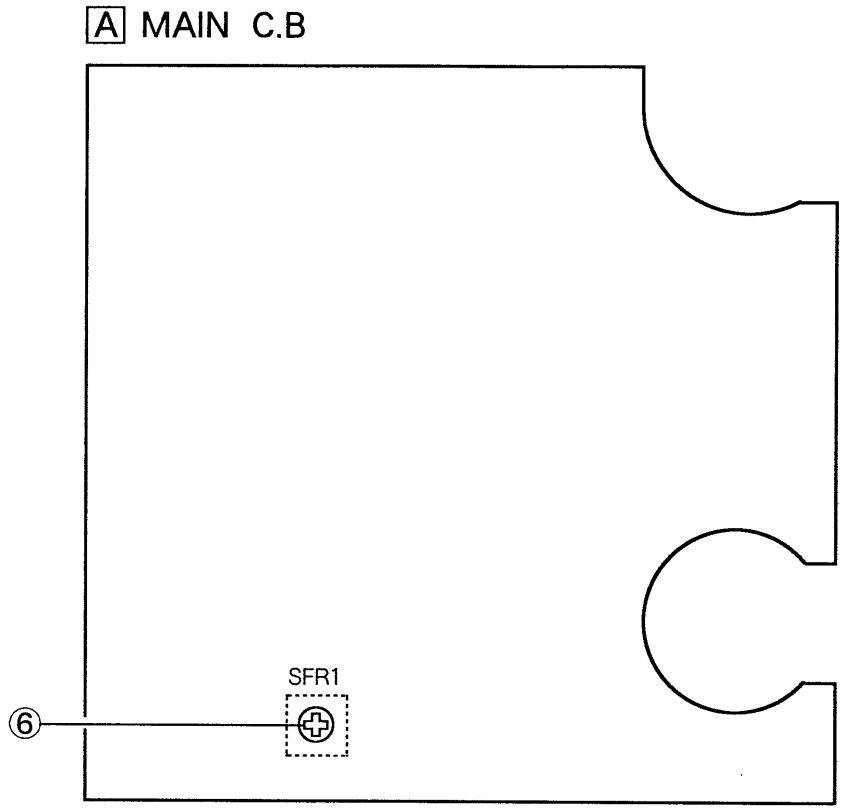
4. AM Tracking Adjustment

L205 ..... 630kHz

CT201 ..... 1,440kHz

5. FM Tracking Adjustment

L203 ..... 87.5MHz



<TAPE RECORDER SECTION>

6. Tape Speed Adjustment

Settings : Test tape • TTA – 100 (TTA – 111S)
: Test point • PHONES JACK
: Adjustment location • SFR1

Method : Play back the test tape, adjust for 3000Hz at FWD and ±45Hz at REV.

7. Azimuth Adjustment

This model is no azimuth adjustment.

PRACTICAL SERVICE FIGURE

<RADIO SECTION>

Sensitivity :	
(IHF THD 3%)	FM Less than 19dB (98.1MHz)
(S/N 10dB)	AM Less than 58dB (999kHz)
Intermediate frequency :	FM 10.7MHz
	AM 450kHz
FM stereo Separation :	More than 17dB (1kHz)

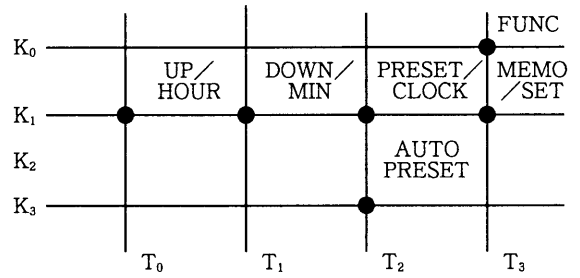
<TAPE RECORDER SECTION>

Wow & flutter :	More than 0.47% (RMS)
Take-up torque :	22~34g-cm (FWD, REV)
F. F torque :	70~150g-cm
REW torque :	70~150g-cm
S/N ratio :	More than 47dB (P.B)
	More than 35dB (REC)
Distortion :	Less than 3% (P.B)
	Less than 10% (REC)
Erasing ratio :	More than 48dB (1kHz)
Noise level :	Less than 3mV (VOL MAX. DC)
Bias frequency :	50kHz
Frequency response :	63Hz~8kHz ± 3.5dB (NORMAL)
	63Hz~10kHz ± 4.5dB (CrO_2, METAL)

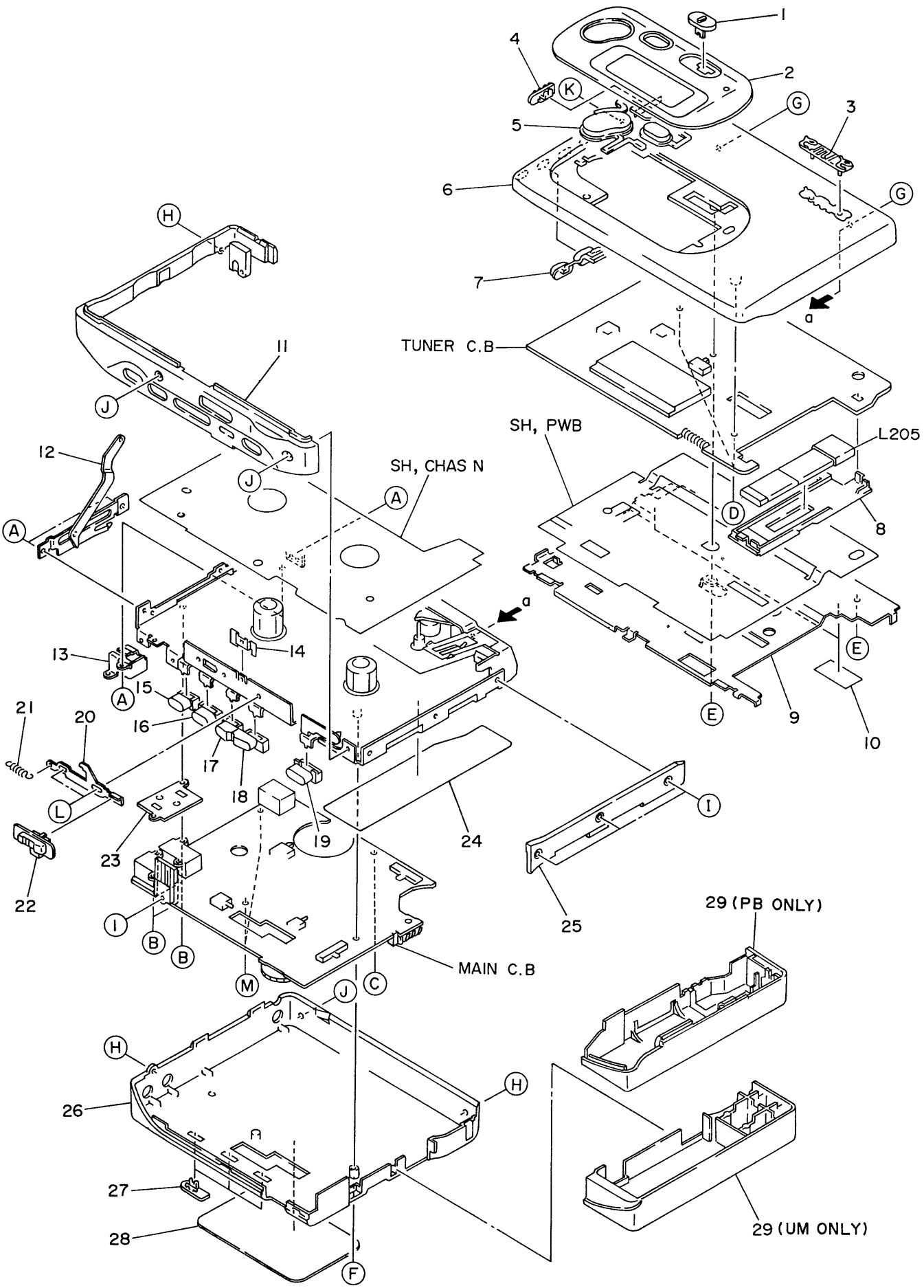
IC DESCRIPTION

IC,TC9308F – 030

<table>
<tr><th>Pin No.</th><th>Pin Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>58</td><td>COM1</td><td>O</td><td rowspan="3">Common output.
Common output.
Segment outputs.
} LCD drive outputs.</td></tr>
<tr><td>19</td><td>COM2</td><td>O</td></tr>
<tr><td>59, 60
1~17</td><td>S1~19</td><td>O</td></tr>
<tr><td>20</td><td>K_0</td><td>I</td><td rowspan="4">Key return signal inputs for the key matrix. (Except for K2)</td></tr>
<tr><td>21</td><td>K_1</td><td>I</td></tr>
<tr><td>22</td><td>K_2</td><td>I</td></tr>
<tr><td>24</td><td>K_3</td><td>I</td></tr>
<tr><td>23</td><td>NC</td><td>–</td><td>Unused.</td></tr>
<tr><td>25</td><td>T_0</td><td>O</td><td rowspan="4">Key return signal outputs for the key matrix.</td></tr>
<tr><td>26</td><td>T_1</td><td>O</td></tr>
<tr><td>27</td><td>T_2</td><td>O</td></tr>
<tr><td>28</td><td>T_3</td><td>O</td></tr>
<tr><td>29, 30</td><td>I_{00}, I_{01}</td><td>I</td><td>
<table>
<tr><th>I_{00}</th><th>I_{01}</th><th colspan="2">Mode</th></tr>
<tr><td>H</td><td>H</td><td>10kHz</td><td rowspan="2">AM</td></tr>
<tr><td>H</td><td>L</td><td>9kHz</td></tr>
<tr><td>L</td><td>H</td><td colspan="2">FM1</td></tr>
<tr><td>L</td><td>L</td><td colspan="2">FM2</td></tr>
</table>
} Band switching input pins.
</td></tr>
<tr><td>31</td><td>AREA</td><td>I</td><td rowspan="2">Inputs to switch the tuner specifications.</td></tr>
<tr><td>32</td><td>TV OUT</td><td>I</td></tr>
<tr><td>33</td><td>ALARM IN</td><td>I</td><td>Alarm input. While this input is “H”, a buzzer sound is output. The input is inhibit in the tuner mode.</td></tr>
<tr><td>34</td><td>REMOTE OFF</td><td>I</td><td>“H” input causes only the PRESET function to turn off.
“L” input causes only the PRESET function to turn on.</td></tr>
<tr><td>35</td><td>STOP IN</td><td>I</td><td>Clock display at “H”. TAPE is displayed at “L”.
The frequency is displayed in the radio mode.</td></tr>
<tr><td>36</td><td>F/R IN</td><td>I</td><td>Goes “HIGH” when the tape runs forward and “LOW” when it runs is reverse.</td></tr>
<tr><td>37</td><td>BUZ OUT</td><td>O</td><td>Buzzer output.</td></tr>
<tr><td>38</td><td>MUTE OUT</td><td>O</td><td>Muting output. “HIGH” level mutes a signal.</td></tr>
<tr><td>39</td><td>TU – H</td><td>O</td><td>Output “H” in the TUNER function mode.</td></tr>
<tr><td>40</td><td>FM OUT</td><td>–</td><td>Unused.</td></tr>
<tr><td>41</td><td>IF IN</td><td>I</td><td>Auto stop input. A signal is input in the MUTE ON mode.</td></tr>
<tr><td>42</td><td>D_{01}</td><td>O</td><td>Error output of phase detector. Applies a pulse to the LPF.</td></tr>
<tr><td>43</td><td>D_{02}</td><td>–</td><td>Unused.</td></tr>
<tr><td>44</td><td>AM OSC IN</td><td>I</td><td>AM OSC input.</td></tr>
<tr><td>45</td><td>PSC</td><td>O</td><td>PSC output.</td></tr>
<tr><td>46</td><td>FM IN</td><td>I</td><td>Receives the prescaler output.</td></tr>
<tr><td>47</td><td>GND</td><td>–</td><td>Ground pin.</td></tr>
<tr><td>48</td><td>$\overline{INH}$</td><td>I</td><td>TUNER “H” is input to activate the PLL. TAPE “L” is input to stop the PLL.</td></tr>
<tr><td>49</td><td>TEST</td><td>–</td><td>Unused.</td></tr>
<tr><td>50, 51</td><td>$\overline{XT}$, XT</td><td>I</td><td>A crystal oscillator is connected to these pins.</td></tr>
<tr><td>52</td><td>RESET</td><td>I</td><td>Reset input. Reset at “L”.</td></tr>
<tr><td>53</td><td>VDD</td><td>–</td><td>Connected to a power supply.</td></tr>
<tr><td>54</td><td>VLCD</td><td>–</td><td>LCD boosting power supply.</td></tr>
<tr><td>55~57</td><td>C1~C3</td><td>–</td><td>Capacitors are connected to these pins for an LCD boosting power supply.</td></tr>
<tr><td>18</td><td>S20</td><td>–</td><td>Unused.</td></tr>
</table>



MECHANICAL EXPLODED VIEW 1/1

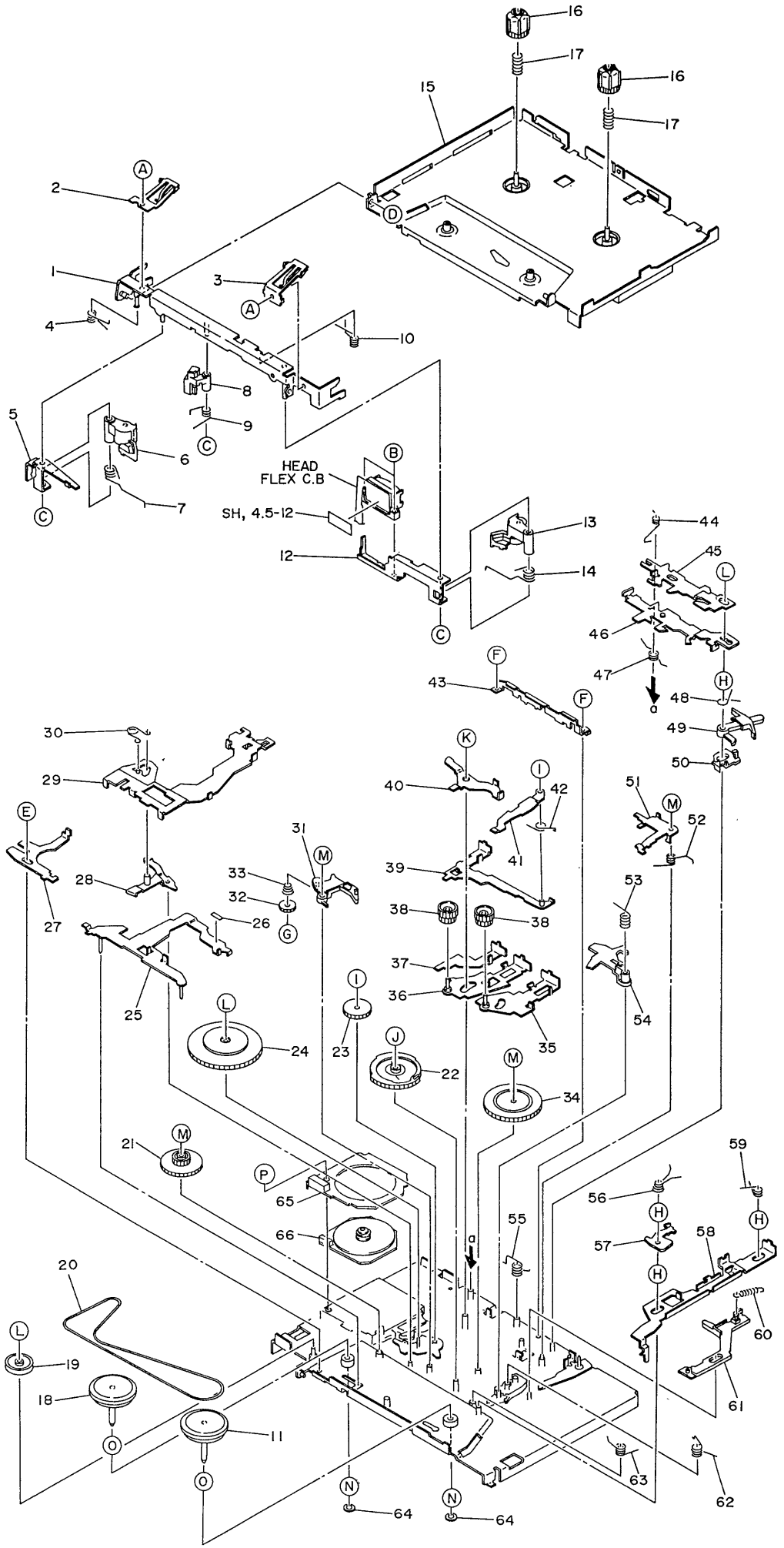


MECHANICAL PARTS LIST 1／1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
1	83-HJ9-005-010		KNOB, SL SB〈JX609〉
1	83-HJ9-021-010		KNOB, SL SB GLD〈J202MK6〉
2	83-HJ9-003-010		WINDOW, LCD〈JX609〉
2	83-HJ9-019-010		WINDOW, LCD GLD〈J202MK6〉
3	87-054-085-019		BADGE, AIWA 22.5 MLD
4	82-HJ4-017-010		KNOB, SLIDE H
5	83-HJ9-004-010		KEY, FUNC〈JX609〉
5	83-HJ9-020-010		KEY, FUNC GLD〈J202MK6〉
6	83-HJ9-002-010		LID, CASS BLK〈JX609〉
6	83-HJ9-018-010		LID, CASS GRA〈J202MK6〉
7	83-HJ9-006-010		KEY, SET
8	83-HJ9-202-010		HLDR, ANT
9	83-HJ9-201-010		HLDR, CASS
10	82-HJ4-236-010		SH, 15-7
11	83-HJ9-022-010		FRAME, CENTER SIL
12	82-HJ4-221-110		HLDR, ASSY
13	82-HJ4-207-010		HLDR, JACK DC
14	82-HJ4-234-010		SPR-P, C-PUSH-N
15	83-HJ9-012-010		P-BUTTON, PLAY
16	83-HJ9-013-010		P-BUTTON, STOP
17	83-HJ9-014-010		P-BUTTON, FF
18	83-HJ9-015-010		P-BUTTON, REW
19	83-HJ9-011-010		P-BUTTON, REC
20	82-HJ4-205-010		PLATE, LOCK
21	82-HJ4-222-110		SPR, LOCK
22	82-HJ4-020-110		KNOB, OPEN
23	82-HJ4-208-010		PLATE, JACK
24	82-HJ4-223-110		SH, CHAS-INS
25	83-HJ9-023-010		FRAME, BOTTOM SIL
26	82-HJ4-003-310		CAB, REAR BLK〈JX609〉
26	82-HJ9-013-010		CAB, REAR GRA〈J202MK6〉
27	82-HJ4-016-010		KNOB, SLIDE R
28	83-HJ9-024-010		PLATE, REAR 202〈J202MK6〉
28	83-HJ9-009-010		PLATE, REAR BLK〈JX609〉
29	09-028-074-010		BATT, BOX ASSY UM〈JX609〉
29	09-028-104-010		BATT, BOX ASSY UM〈J202MK6〉
29	09-028-076-010		BATT, BOX ASSY PB〈JX609〉
29	09-028-105-010		BATT, BOX ASSY PB〈J202MK6〉
A	87-263-500-010		V+1.4-1.4 1
B	87-262-508-310		V+1.4-3.5 BLK
C	87-067-385-010		VT1.4-2.5HL
D	87-067-732-010		VT1.4-3HL
E	87-067-384-010		VT1.4-3.5HL
F	87-067-430-010		VT1.4-5
G	87-067-986-010		S-HINGE 1.4-1BLK NL
H	87-067-706-010		1.4-1.8 BLK
I	87-067-359-010		S-SCRW, +1.4-2.5 BLK
J	87-067-360-010		S-SCRW, +1.4-3.5 BLK
K	87-067-628-010		S-SCRW, +1.4-1 BLK
L	87-067-738-010		1.4-1 BLK N
M	87-067-746-010		M1.4-2 H0.5

TAPE MECHANISM EXPLODED VIEW 1/1



TAPE MECHANISM PARTS LIST 1／1

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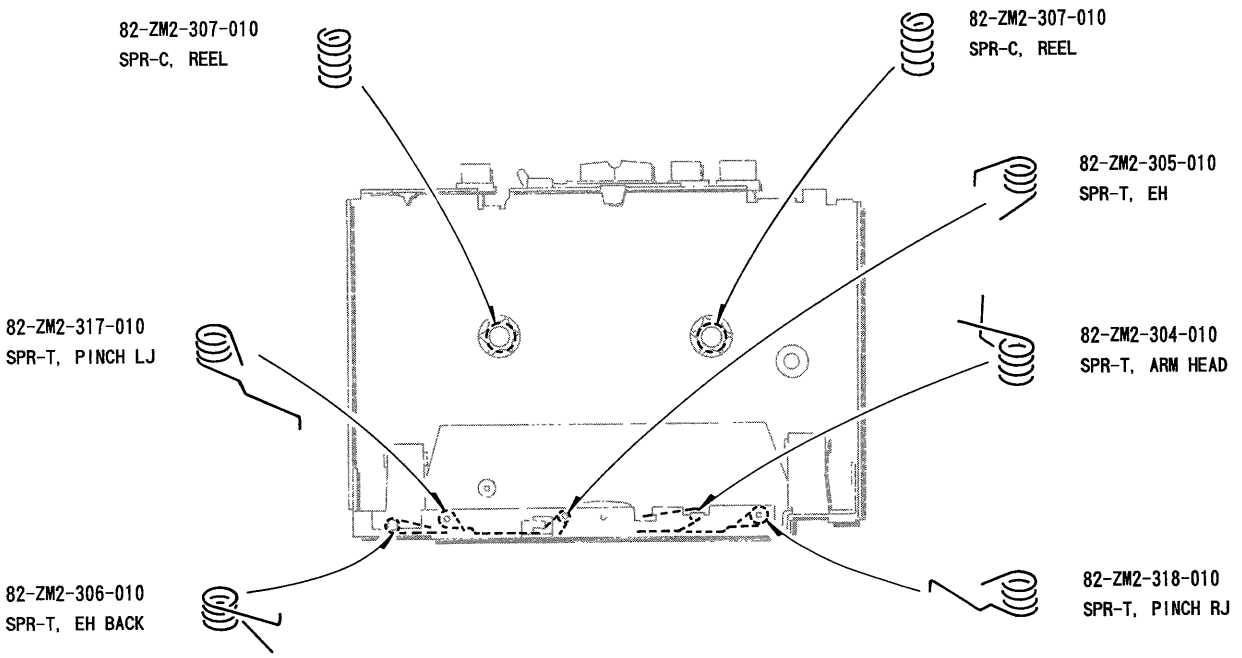
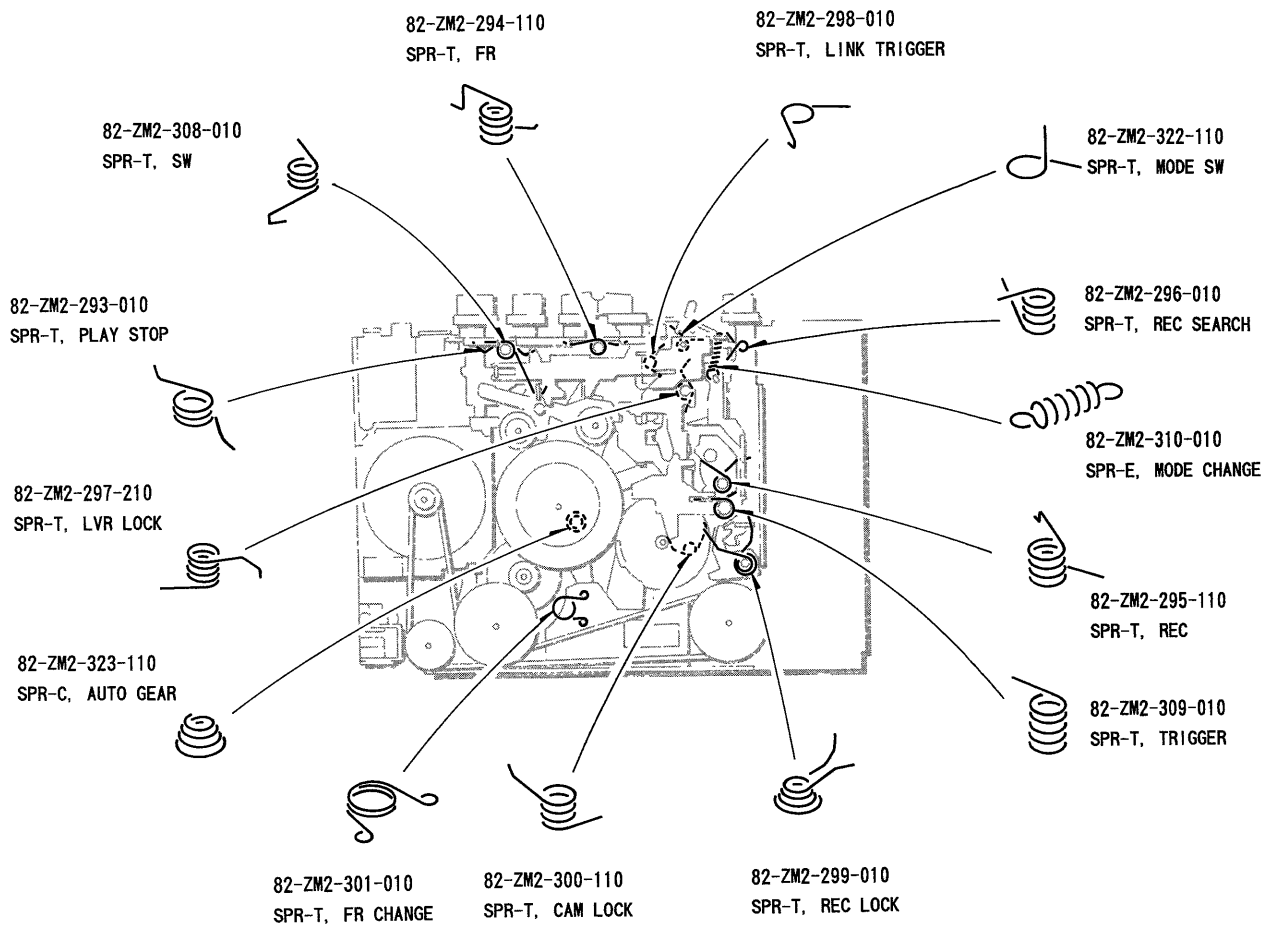
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

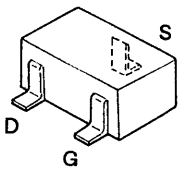
REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
1	82-ZM2-224-010		HLDR ASSY, HEAD J
2	82-ZM2-233-110		SPR-P, HLD L
3	82-ZM2-234-110		SPR-P, HLD R
4	82-ZM2-306-010		SPR-T, EH BACK
5	82-ZM2-271-010		LVR, EH LOCK
6	82-ZM2-227-110		ARM ASSY, PINCH L
7	82-ZM2-317-010		SPR-T, PINCH LJ
8	82-ZM2-260-010		ARM ASSY, EH
9	82-ZM2-305-010		SPR-T, EH
10	82-ZM2-304-010		SPR-T, ARM HEAD
11	82-ZM2-215-310		FLY-WHL ASSY, L
12	82-ZM2-232-110		ARM, HEAD
13	82-ZM2-230-110		ARM ASSY, PINCH R
14	82-ZM2-318-010		SPR-T, PINCH RJ
15	M8-2ZS-290-000		ABL-10
16	82-ZM2-278-010		GEAR, REEL
17	82-ZM2-307-010		SPR-C, REEL
18	82-ZM2-211-210		FLY-WHL ASSY, R
19	82-ZM2-315-010		PULLEY, IDLE
20	82-ZM2-292-010		BELT, SQ 0.65-194.7
21	82-ZM2-281-010		GEAR, LINK A
22	82-ZM2-285-110		GEAR, CAM
23	82-ZM2-284-010		GEAR, PLAY
24	82-ZM2-286-110		SLIP ASSY
25	82-ZM2-243-110		LVR ASSY, CAM
26	82-ZM2-327-010		SH, 2-7.7-0.14
27	82-ZM2-256-110		LVR, FR MODE
28	82-ZM2-250-010		ARM ASSY, PLAY GR
29	82-ZM2-255-010		LVR ASSY, HEAD UP
30	82-ZM2-301-010		SPR-T, FR CHANGE
31	82-ZM2-272-010		ARM, AUTO
32	82-ZM2-273-110		GEAR, AUTO
33	82-ZM2-323-110		SPR-C, AUTO GEAR
34	82-ZM2-282-010		GEAR, LINK B
35	82-ZM2-238-410		LVR ASSY, REW
36	82-ZM2-235-310		LVR ASSY, FF
37	82-ZM2-261-010		LVR, STOP
38	82-ZM2-283-010		GEAR, FR
39	82-ZM2-240-010		LVR ASSY, PLAY
40	82-ZM2-328-010		LINK, HEAD UP 2
41	82-ZM2-267-010		ARM, DIR
42	82-ZM2-298-010		SPR-T, LINK TRIGGER
43	82-ZM2-312-010		HLDR, LVR
44	82-ZM2-308-110		SPR-T, SW
45	82-ZM2-329-010		LVR, PLAY SW 2
46	82-ZM2-265-010		LVR, LOCK
47	82-ZM2-293-010		SPR-T, PLAY STOP
48	82-ZM2-322-110		SPR-T, MODE SW
49	82-ZM2-277-010		ARM, MODE SW
50	82-ZM2-274-010		LINK, MODE SW
51	82-ZM2-266-110		LINK, TRIGGER LOCK
52	82-ZM2-297-210		SPR-T, LVR LOCK
53	82-ZM2-309-010		SPR-T, TRIGGER
54	82-ZM2-275-110		ARM, TRIGGER
55	82-ZM2-294-110		SPR-T, FR
56	82-ZM2-299-010		SPR-T, REC LOCK
57	82-ZM2-268-010		ARM, REC LOCK
58	82-ZM2-254-110		LVR, REC
59	82-ZM2-296-010		SPR-T, REC SEARCH
60	82-ZM2-310-010		SPR-E, MODE CHANGE
61	82-ZM2-276-110		LVR, MODE CHANGE
62	82-ZM2-295-210		SPR-T, REC
63	82-ZM2-300-110		SPR-T, CAM LOCK
64	86-550-455-010		SH, 0.87-2.25-0.25CUT
65	82-ZS2-604-110		HOLD FP
66	09-001-258-010		MOTOR KIT ABL-10(M1)
A	87-263-503-310		V+1.4-2.0 CR
B	87-067-954-010		S-SCRW, V+1.4-3.7
C	87-067-569-010		PW0.83-2.5-0.25
D	87-078-011-010		PW, 1.3-3.1-0.4 C-60
E	82-ZM2-314-010		S-SCREW, V+1.4-1
F	87-078-043-010		V+1.4-1.2
G	87-067-998-010		PW, 0.8-2.5-0.2 SLT
H	87-067-729-010		PW, 1.3-4-0.25 C-CUT
I	87-067-548-010		PW 1.2-3-0.25
J	87-078-034-010		PW, 1-3-0.25 SLT
K	87-078-046-010		PW, 1.8-4-0.2 C-CUT
L	87-067-693-010		PW, 3-0.8-0.25 SLT
M	87-067-860-010		PW, 3-0.95-0.4
N	87-078-025-010		SH, 1.2-2.4-0.25
O	87-067-370-010		RW1.2-3-0.25
P	87-067-815-010		SCREW VT+1.4-3

SPRING APPLICATION POSITION

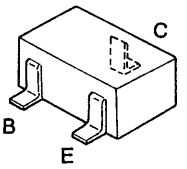




TRANSISTOR ILLUSTRATION

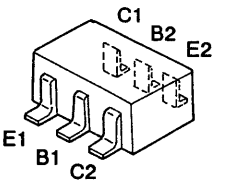


2SK882



2SA1362
2SA1586
2SA1588
2SC4116
2SC4213

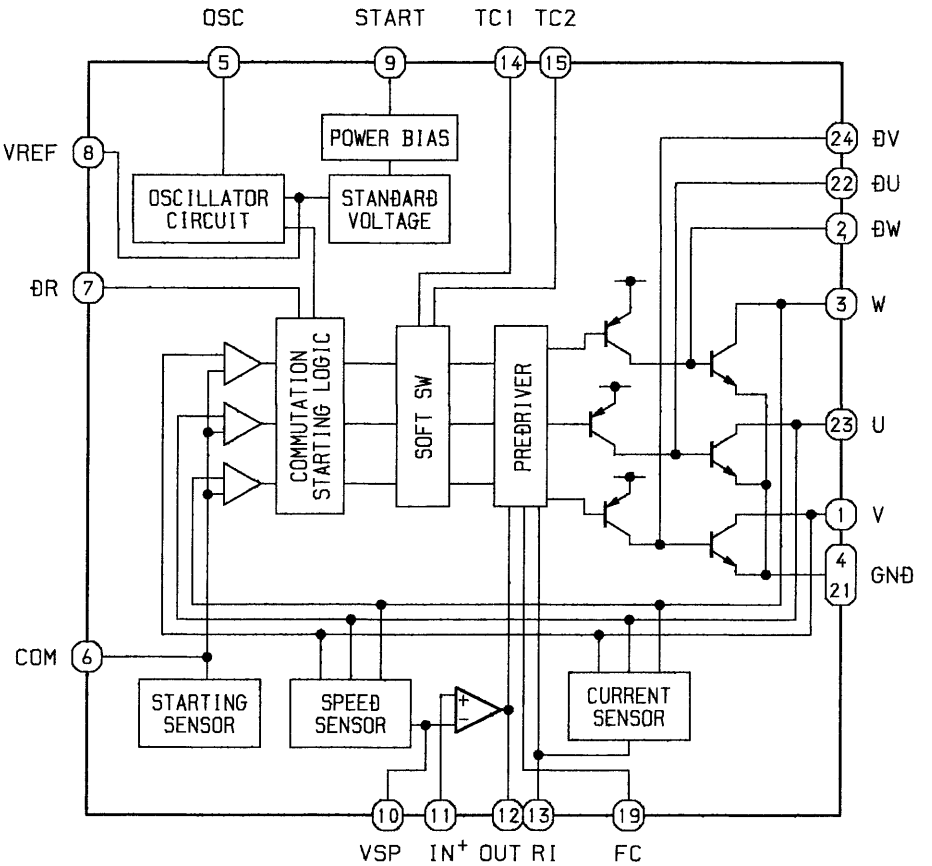
2SC4215
RN1304
RN1305
RN1307
RN2307



HN1C01
RN1605
RN1607
RN1610
RN4607
IMD6

IC BLOCK DIAGRAM

IC, LB1674V



■ ACCESSORIES／PACKAGE LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
1	83-HJ9-901-010		IB, H
2	09-028-076-010		BATT BOX ASSY PB〈609〉
3	09-028-105-010		BATT BOX ASSY PB〈202MK6〉
4	09-028-074-010		BATT BOX ASSY UM〈609〉
5	09-028-104-010		BATT BOX ASSY UM〈202MK6〉
6	82-HJ4-951-210		CARRYING, CASE
8	87-042-163-019		AC-207HA
9	87-047-140-010		PB-4S NAY
10	87-048-278-010		HP-24NA

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER
ｻｰｼﾞｻﾌﾟﾚｯｻ	SERGESUPPRESSOR
ｾﾗｺﾝ	CAP, CERA

サービス技術ニュース	
番号	連絡内容
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MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTORL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOADING MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL
ｼｸｱｰﾑ	ARM, SHAFT
ｼｸｶﾞｲﾄﾞ	GUIDE, SHAFT
ｽﾄﾗｯﾌﾟ	STRAP
ﾄｸﾅﾍﾞ	S-SCRW
ﾋﾝｼﾞ	HINGE
ﾋﾝｼﾞﾋﾞｽ	S-SCRW
ﾋﾞｽｾﾚｰﾄ	SCRW, SERRART

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